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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,732	09/12/2003	In Hee Han	9988.057.00-US	4914

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EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,732

[illegible]

HAN ET AL.

Examiner

Stephen Gravini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-4, 6, 8 and 9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-4, 6, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 4, and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Each of those claims contains the independently claimed feature of chamfers between the fan and motor parallel to each other. That feature has no basis in the originally filed application and is construed to me new matter such that it is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Torborg et al. (US 5,555,647). Torborg is construed to disclose a clothes dryer comprising a drying drum **22** rotatably mounted in a body **10**, a motor bracket **36** fixed to a bottom of an inside of the body, a motor **24** mounted on the motor bracket for generating a

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rotating power, the motor having a motor shaft wherein a fan **46** coupled to the motor shaft, the motor shaft comprising chamfer[s] **33** disposed between the fan and the motor [and parallel to each other] , the chamfer[s] facilitating removal of the fan from the motor shaft wherein the disclosed flat portion of shaft **33** shown in figure 5 is construed to anticipate the claimed chamfer because both inherently facilitate removal of the fan from the motor shaft, as expressly disclosed in column 3 lined 53-67. The claimed parallel feature is also construed to be inherently disclosed in Torborg because the figures show a parallel relationship between the fan and motor in the same depth as in the originally filed application such that one skilled in the art would read the claimed parallel feature. Chamfer is broadly and reasonably construed from the specification to be a part of a shaft that can be clamped with a tool from specification paragraph [0032] such as a spanner being inserted into a chamfered part from specification paragraph [0033]. Chamfer is a term well known in the prior art of drive shafts to be a portion of the shaft allowing a clamping configuration as discussed in LeFlar, Pool, or Kennedy in an earlier action. Dictionary definitions are unnecessary to define the claimed terms since the specification and drawings clearly define the term chamfer with respect to the claimed invention. Torborg is also construed to disclose the claimed D-cut form as shown in figure 5 since the cut away portion of a cylindrical shaft will form a cut shape of the letter D, as claimed, and as also shown in figure 5, the chamfer is disposed between the motor and bracket as claimed.

Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Tremblay (US 2,547,238). Tremblay is construed to disclose the claimed invention comprising:

a motor bracket **50** fixed to a bottom of the dryer;

a motor **48** mounted on the motor bracket, the motor including a motor shaft extending therefrom; and

a fan **108** coupled with the motor shaft, wherein the motor shaft includes chamfers **98, 100** parallel to each other and configured for facilitating removal of the fan from the motor shaft.

Claim Rejections - 35 USC § 103

Claims 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torborg in view of Cunha et al. (US 5,664,936). Torborg is construed to disclose the claimed invention, as rejected above, except for the claimed chamfer between the motor and motor bracket [and parallel to each other]. Cunha, another fan motor mounting arrangement, is construed to disclose a chamfer between the motor and motor bracket [and parallel to each other] at column 2 line 18 through column 3 line 25 and shown in figures 3 and 4. It would have been obvious to one skilled in the art to combine the teachings of Torborg with the chamfer between the motor and motor bracket [and parallel to each other], construed disclosed in Cunha, for the purpose of allowing structural part cooperation such that additional parts are not required making the assembly fast and practical without impairing the desired result thus reducing the costs of the product.

Double Patenting

Claims 1-4, 6, and 8-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S.

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Patent No. 6,874,248 in view of either Torborg, Reisch, and/or Cunha. Applicants' assignee earlier patent discloses the claimed invention, claiming each element, except for the claimed chamfer portion. It would have been obvious to one skilled in the art to combine chamfer portion, construed disclosed by Torborg, Reisch, and/or Cunha, for the purpose of facilitating insertion of a body into a shaft or for providing a complementary cross section fitting for such intended uses including claimed statements of tool cooperation or removal facilitation.

Response to Arguments

Applicant's arguments with respect to claims 1-4, 6, and 8 have been construed but are moot in part based on new grounds of rejection. Applicants are reminded that current Office practice permits broadest reasonable construction of claims in light of the specification and statements of intended use are not given patentable weight unless structurally different from prior art.

anticipation

Applicants' amended claims have been examined in light of the new matter added since the last Office action. Those new matter features are treated with respect to the plain meaning associated with all fan and motor relationships in the prior art. The prior art shows in the figures and discusses that the fan and motor are parallel to each other. Applicants argue that the new matter overcomes the prior art rejection, but this feature is found in the prior art and is not consistent with the originally filed application. Applicants also argue the chamfer definition overcomes the rejection, but that definition is not specified such that it overcomes the first anticipatory rejection. Applicants are

choosing narrow definitions to overcome the rejection but the Office must construe the claims reasonably and broadly in light of the accompanying specification.

obviousness

Again applicants' amended claims have been examined in light of the new matter added since the last Office action. Those new matter features are treated with respect to the plain meaning associated with all fan and motor relationships in the prior art. The prior art shows in the figures and discusses that the fan and motor are parallel to each other. Arguments made with respect to primary reference Torborg are addressed above and not repeated here. Applicants argue that secondary reference Cunha can not be interpreted as cooperating with a tool to prevent a shaft from rotating when the fan is removed from the shaft. This argument is not persuasive on two grounds. First it is inherent to those skilled in the art that a tool can be used regardless of a fan motor arrangement to prevent a shaft from rotating since a wrench or vice grip can be clamped to the shaft of either reference and prevent shaft rotation. Second, applicants are arguing a desired result that could be accomplished in the prior art under the current Office practice of reasonably and broadly construing claims in light of the accompanying specification. This desired result does not define the invention of the structure presented in Torborg in view of Cunha.

double patenting

Applicants argue that assignee patent to Hong does not recite a chamfer. However the obviousness type double patenting rejection was made to show that it

would have been obvious to one skilled in the art to modify assignee's earlier patent by claiming a chamfer as rejected above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josiah C. Cocks can be reached on 571 272 4874. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMG
November 8, 2006

A handwritten signature in cursive script, appearing to read "Stephen Grant".